

ENTERED

September 29, 2016

David J. Bradley, Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

KENNETH DAVIDSON, et al.,

§

Plaintiffs,

§

v.

§

CIVIL ACTION NO. H-15-0827

§

FAIRCHILD CONTROLS CORPORATION,

§

§

Defendant.

§

§

MEMORANDUM OPINION

Pending before the court¹ are Defendant Fairchild Controls Corporation's ("Fairchild") Motion for Summary Judgment (Doc. 227), Fairchild's Motion to Exclude the Report, Testimony, and Opinions of Don Hansen ("Hansen") (Doc. 254), and Fairchild's Motion to Exclude the Report, Testimony, and Opinions of C. Van Netten (Doc. 255). The court has considered the motions, Plaintiffs Kenneth Davidson ("Davidson"), his wife ("Jana"), their children, and Thomas Farmer's ("Farmer") (collectively, "Plaintiffs") responses, Fairchild's replies, the parties' supplemental briefs and exhibits, the competent summary judgment evidence, and the applicable law. For the reasons set forth below, the court **GRANTS** Fairchild's motion for summary judgment. As that disposes of the case, the court **DENIES AS MOOT** Fairchild's motions to exclude.

I. Case Background

¹ The parties consented to proceed before the undersigned magistrate judge for all proceedings, including trial and final judgment, pursuant to 28 U.S.C. § 636(c) and Federal Rule of Civil Procedure 73. See Docs. 245, 246, Consents; Doc. 247, Ord. Dated May 5, 2016.

Plaintiffs originally filed this products liability action in the United States District Court for the Southern District of New York, alleging that Davidson and Farmer were exposed to toxic fumes while operating an airplane on a work assignment.

A. Factual Background

At the time relevant to this action, Fairchild manufactured air cycle machines ("ACM") and other components for commercial and military aircraft.² Additionally, Fairchild repaired and overhauled components that it or one of its predecessors had manufactured.³ Fairchild ceased manufacturing ACMs in approximately 1980 but continued to repair and overhaul ACMs.⁴

In 2007, Fairchild repaired and overhauled the ACM that was installed in the Twin Commander 690A turboprop aircraft, which was owned by Northrop Grumman Corporation and/or Northrop Grumman Systems Corporation ("NGC") and used in aerial surveying.⁵ The Twin Commander 690A and certain other types of aircraft utilize an ACM as part of the environmental control system, which delivers

² Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶¶ 4-5.

³ Id. ¶ 4.

⁴ Id. ¶ 6.

⁵ See id. ¶ 26; Doc. 1, Pls.' Compl. p. 8 of 16; cf. Doc. 227-4, Ex. 3 to Fairchild's Mot. for Summ. J., Dep. of Thomas Farmer pp. 19-21, 23 (indicating generally that he piloted for aerial surveying missions at several employers including NGC and that he flew the Twin Commander 690A for NGC).

pressurized, temperature-conditioned air to the cockpit and cabin.⁶ An ACM is comprised of a compressor, a turbine, a bearing cartridge, and an oil compartment.⁷ A wick-fed oil lubrication system provides ball bearings of an ACM with the necessary oil to perform properly.⁸

"[U]nfiltered high pressure hot turbine engine compressor 'bleed air'" is throttled and cooled with "ram air" from outside the aircraft's airframe by a heat exchanger.⁹ The ACM compressor raises the air pressure to a higher level and sends the air to a secondary heat exchanger where it is cooled by ram air and then enters the ACM's turbine.¹⁰

In the turbine, the high pressure air powers the compressor and, in the process, is further cooled.¹¹ The air and any condensate produced exits the ACM to the water separator, which dehumidifies the air.¹² From there, the air passes through a mixing

⁶ Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶ 5; see also id. ¶¶ 8, 9.

⁷ Id. ¶ 13.

⁸ See id. ¶¶ 13-15.

⁹ Doc. 236-6, Ex. 3 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Hansen's Expert Report/Review of In-Flight Cabin Fume-Air Incident ("Hansen's Report") p. 3; see also Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶ 12.

¹⁰ Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶ 12.

¹¹ See id.

¹² See id.

chamber that conditions the air to the selected temperature by adding the appropriate amount of bleed air directly from the compressors of the aircraft.¹³ The air is then distributed throughout the cockpit and cabin.¹⁴

In late May 2011, Bill O'Connor, a pilot for NGC, flew the Twin Commander 690A on a work assignment.¹⁵ Afterwards, he complained of fumes and smoke in the cockpit.¹⁶ On May 31, 2011, NGC, Farmer and Davidson's employer, instructed the two men to fly the airplane "to verify those smoke and fumes" reported by the other pilot.¹⁷

Farmer, the pilot on May 31, 2011, testified that he did not want to fly the airplane, but his managers pressured him to make the flight, even though Farmer and the managers were aware of prior smoke and fumes incidents.¹⁸ Farmer admitted that he was aware of

¹³ See id.

¹⁴ Id.

¹⁵ See Doc. 227-7, Ex. 6 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Davidson p. 16; Doc. 236-10, Ex. 7 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer pp. 5-6; Doc. 236-5, Ex. 2 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Davidson p. 69.

¹⁶ See Doc. 236-10, Ex. 7 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer pp. 5-6; Doc. 236-5, Ex. 2 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Davidson p. 69.

¹⁷ Doc. 236-10, Ex. 7 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer pp. 5, 6; see also Doc. 227-7, Ex. 6 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Davidson p. 17.

¹⁸ Doc. 236-10, Ex. 7 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer pp. 5, 6; Doc. 227-6, Ex. 5 to Fairchild's Mot. for Summ. J., Ga. Workers' Comp. Dep. of Farmer p. 53.

the problems on the Twin Commander 690A prior to the May 31, 2011 flight.¹⁹ Farmer testified that smoke and fumes entered the cockpit on "[e]very flight . . . mildly at lower altitudes, but at higher altitudes and a higher temperature selection for the cabin heat . . . significant smoke and oil mist" formed.²⁰ By May 2011, Farmer had experienced smoke and fumes at least fifty times while flying the Twin Commander 690A.²¹ "There was always fumes and an oily mist in the cabin. But at a higher altitude, above 10,000 feet, say, up to 28 or 30,000 feet, you're at a higher temperature selection for cabin heat, the aircraft had a 90 percent probability of excessive smoke and fumes."²²

Farmer reported the problem "[v]erbally, probably 100 times"

¹⁹ Doc. 227-6, Ex. 5 to Fairchild's Mot. for Summ. J., Ga. Workers' Comp. Dep. of Farmer p. 53.

²⁰ Doc. 227-6, Ex. 5 to Fairchild's Mot. for Summ. J., Ga. Workers' Comp. Dep. of Farmer p. 47; see also Doc. 236-4, Ex. 1 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Farmer p. 52.

²¹ Doc. 227-6, Ex. 5 to Fairchild's Mot. for Summ. J., Ga. Workers' Comp. Dep. of Farmer p. 47. The court acknowledges that, at his deposition in this action, Farmer contradicted his prior testimony, stating that the only time he was exposed to chemicals in the Twin Commander 690A was on May 31, 2011. Doc. 236-4, Ex. 1 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Farmer p. 48. When asked at his deposition in this action if he was changing his prior testimony, Farmer replied, "Yes." Id. Plaintiffs failed to explain the contradiction in Farmer's sworn testimony. Therefore, the court deems his prior testimony to include admissions against interest. Even in Plaintiffs' brief in opposition to Fairchild's motion for summary judgment, Plaintiffs admit that Farmer had experienced smoke and fumes in the Twin Commander 690A before the May 31, 2011 flight. Doc. 236-2, Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J. p. 1 ("The plane had a history of smoke and fumes in the cabin, including on previous occasions when Thomas Farmer had flown it.").

²² Id. p. 48.

and wrote notes on forms to be placed in the logbooks.²³ Farmer also knew that other NGC pilots had experienced smoke and fumes in the cockpit during flights and that Bill O'Connor had suffered respiratory irritation, confusion, and disorientation as a result.²⁴ After flying the Twin Commander 690A on multiple missions, Farmer "felt sick all the time" with respiratory stress, more headaches, and dizziness.²⁵ On one flight in June 2010, Farmer was overcome by the smoke and fumes was unable to exercise good judgment or accurate fuel calculations when the gauge malfunctioned.²⁶ The airplane ran out of fuel, which led to Farmer's conducting a "flamed out" approach and glider landing.²⁷

Davidson, a sensor operator, became aware of the problems with the Twin Commander 690A about a week before his May 31, 2011 flight, having heard that occupants, including Bill O'Connor, had experienced odors in the cockpit during flights.²⁸ Davidson was prompted by the information to search the internet on "this type of

²³ Id. pp. 48-49; see also Doc. 227-9, Ex. 8 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer p. 10.

²⁴ Doc. 227-6, Ex. 5 to Fairchild's Mot. for Summ. J., Ga. Workers' Comp. Dep. of Farmer pp. 50-51.

²⁵ Doc. 227-10, Ex. 9 to Fairchild's Mot. for Summ. J., Unsworn Statement of Farmer p. B.

²⁶ Id.

²⁷ Id.

²⁸ See Doc. 227-5, Ex. 4 to Fairchild's Mot. for Summ. J., Dep. of Davidson pp. 69-70; Doc. 227-7, Ex. 6 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Davidson p. 17; Doc. 236-5, Ex. 2 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Davidson pp. 68, 69.

fume event" to find out what they could be and what problems could be associated with them.²⁹ Based on his research, Davidson sent an email to management to express his concerns.³⁰ When questioned about the results of his research, Davidson reported that he could not recall anything at all.³¹ When it came to the May 31, 2011 flight, Davidson stated that he was not concerned and viewed it simply as part of the job.³²

As soon as Davidson and Farmer got into the airplane, they could smell the smoke and fumes but began to fly the mission anyway.³³ By the time they reached an altitude of about 28,000 feet, "the smoke and fumes were so bad that [Farmer experienced] burning eyes, coughing, and more difficulty breathing."³⁴ Farmer thought Davidson appeared to be "halfway intoxicated."³⁵ Davidson reported that he tasted oil and metal and started feeling groggy

²⁹ Doc. 227-7, Ex. 6 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Davidson pp. 17-18.

³⁰ Id. p. 17.

³¹ See id. p. 18.

³² Doc. 236-5, Ex. 2 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Davidson p. 68.

³³ Doc. 236-10, Ex. 7 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer p. 6.

³⁴ Id.

³⁵ Id.

and dizzy.³⁶ He said he felt as if he were moving in slow motion.³⁷

The two men donned oxygen masks.³⁸ Farmer contacted the air traffic controller to report the fume event.³⁹ Air traffic control gave permission for an immediate descent, and, after reaching a low enough altitude, Davidson and Farmer depressurized the cabin and flushed the air.⁴⁰ They returned to the airport and landed, but neither one can remember how they made it back to the hotel.⁴¹ From the time the men entered the airplane to the time they landed, sixty to ninety minutes had elapsed.⁴²

According to Plaintiffs' complaint, Farmer suffered "permanent damage to his eyes and lungs, decreased mental acuity, neurological deficits, severe headaches, weakness, irritability, and injuries to other parts of his body."⁴³ The complaint stated that Davidson suffered "toxic encephalopathy with persistent cognitive sequela, industrial asthma, fatigue, difficulty with balance, memory loss,

³⁶ Doc. 236-5, Ex. 2 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Davidson p. 69.

³⁷ Id.

³⁸ See Doc. 227-7, Ex. 6 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Davidson p. 18; Doc. 227-9, Ex. 8 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer p. 7.

³⁹ Doc. 227-9, Ex. 8 to Fairchild's Mot. for Summ. J., La. Workers' Comp. Dep. of Farmer p. 7.

⁴⁰ Id.

⁴¹ See id.

⁴² See Doc. 236-4, Ex. 1 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Dep. of Farmer p. 47.

⁴³ Doc. 1, Pls.' Compl. p. 15 of 16.

eye and throat irritation, and injuries to other parts of his body.”⁴⁴

On June 1, 2011, Farmer and Davidson flew the Twin Commander 690A, at low altitude and unpressurized, to the repair location.⁴⁵ He flew the airplane several other times after being told that the problem was fixed, experiencing approximately six more incidents of smoke and fumes.⁴⁶ The ACM was returned to Fairchild on October 17, 2011, for an evaluation.⁴⁷ The Fairchild report stated, “As a result of the oil starvation, heat caused expansion of the shaft, bearing, and cartridge assembly thus causing damage to the turbine and impeller as well as the diffuser.”⁴⁸ The report indicated that the ACM was to be overhauled.⁴⁹

B. Procedural Background

On May 30, 2014, Plaintiffs filed this diversity action in the U.S. District Court for the Southern District of New York pursuant

⁴⁴ Id.

⁴⁵ See Doc. 227-9, Ex. 8 to Fairchild’s Mot. for Summ. J., La. Workers’ Comp. Dep. of Farmer p. 17; Doc. 236-5, Ex. 2 to Pls.’ Mem. in Opp. to Fairchild’s Mot. for Summ. J., Dep. of Davidson p. 68.

⁴⁶ See Doc. 227-9, Ex. 8 to Fairchild’s Mot. for Summ. J., La. Workers’ Comp. Dep. of Farmer p. 17.

⁴⁷ Doc. 227-2, Ex. 1 to Fairchild’s Mot. for Summ. J., Decl. of Paul Dziorny ¶ 27.

⁴⁸ Doc. 236-9, Ex. 6 to Pls.’ Mem. in Opp. to Fairchild’s Mot. for Summ. J., Shop Visit Report.

⁴⁹ See id.

to New York common law.⁵⁰ The original complaint named as defendants fifteen business entities that Plaintiffs believed to be involved "in the design, construction, and maintenance of the subject aircraft and its component parts."⁵¹ Against Fairchild, Plaintiffs averred that the ACM was "defective in its design and/or manufacture and/or assembly, allowing drops of oil leaking from the engine to access the aircraft's bleed air-ducting system and into the cabin."⁵² Plaintiffs' claims against Fairchild were based on defective product theories: defective design, failure to warn, and breach of express or implied warranty.⁵³ Jana and the children sought damages for loss of consortium.⁵⁴

The case proceeded in the New York district court for ten months, during which time, the parties engaged in preliminary litigation matters, including the filing of waivers of service, notices of appearance, disclosures, pleadings, motions to dismiss, and stipulations of dismissal.⁵⁵ On March 26, 2016, the New York

⁵⁰ See Doc. 1, Pls.' Compl.

⁵¹ Doc. 236-2, Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J. p. v; see also Doc. 1, Pls.' Compl. pp. 2-8 of 16. Farmer did not join in the naming of Northrop Grumman Corporation and/or Northrop Grumman Systems Corporation as a defendant. See id. pp. 5-8 of 16.

⁵² Doc. 1, Pls.' Compl. p. 12 of 16.

⁵³ See id. pp. 12-13 of 16.

⁵⁴ See id. pp. 15-16 of 16.

⁵⁵ See, e.g., Doc. 6, Notice of Appearance; Doc. 7, Corp. Disclosure Statement; Doc. 13, Waiver of Serv.; Doc. 20, Ans.; Doc. 30, Mot. to Dismiss; Doc. 100, Stipulation & Ord. Dated Sept. 4, 2014; Doc. 132, Pls.' 1st Am. Suppl. Compl.

court entered an opinion on a motion to dismiss filed by Fairchild, which, by that time, was the only remaining defendant.⁵⁶ The court determined that it lacked personal jurisdiction but, in lieu of dismissal and by agreement of the parties, transferred the case to this court pursuant to 28 U.S.C. § 1404(a).⁵⁷

On April 10, 2015, Fairchild filed its answer, asserting twenty-nine defenses.⁵⁸ On May 1, 2015, the court held a scheduling conference and entered a docket control order.⁵⁹ On May 8, 2015, Plaintiffs amended their complaint to delete portions not applicable to Fairchild.⁶⁰ The parties engaged in discovery and called upon the court to resolve several discovery issues.⁶¹

On January 25, 2016, the parties unsuccessfully attempted mediation.⁶² On February 12, 2016, Fairchild timely filed the pending motion for summary judgment.⁶³ In Plaintiffs' response,

⁵⁶ See Doc. 201, Op. & Ord. Dated Mar. 26, 2015.

⁵⁷ See id.

⁵⁸ See Doc. 204, Fairchild's Ans.

⁵⁹ See Doc. 209, Min. Entry Ord. Dated May 1, 2015; Doc. 210, Docket Control Ord. Dated May 1, 2015.

⁶⁰ See Doc. 213, Pls.' 2^d Am. Compl.

⁶¹ See, e.g., Doc. 218, Jt. Mot. for Protective Ord.; Doc. 219, Protective Ord. Dated July 21, 2015; Doc. 220, Fairchild's Mot. to Compel Disc. Resps.; Doc. 222, Pls.' Resp. in Opp. to Mot. to Compel Disc. Resps.; Doc. 223, Fairchild's Reply in Support of its Mot. to Compel; Doc. 224, Ord. Dated Jan. 6, 2016.

⁶² See Doc. 226, Ord. Dated Jan. 8, 2016; Doc. 236-2, Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J. p. v.

⁶³ See Doc. 210, Docket Control Ord. Dated May 1, 2015; Doc. 227, Fairchild's Mot. for Summ. J.

which was filed with leave of court on April 4, 2016, Plaintiffs explained that discovery was ongoing and that they expected to discover additional information and documents in support of specific material facts.⁶⁴ On April 21, 2016, Fairchild replied to Plaintiffs' response, and discovery ended on April 29, 2016.⁶⁵ The summary judgment briefing, however, continued over the course of nearly two additional months, during which Fairchild supplemented exhibits twice and filed a supplemental brief in support of summary judgment and Plaintiffs filed a supplemental brief in opposition to summary judgment.⁶⁶

While the briefing was ongoing, the court referred the case to the undersigned.⁶⁷ The court extended the deadlines for expert depositions and non-dispositive motions and removed the case from docket call.⁶⁸ At a discovery hearing in late April 2016, the court resolved disputes and extended discovery.⁶⁹ On May 3, 2016, the parties consented in writing to proceed before the undersigned, and

⁶⁴ Doc. 236-2, Pls.' Opp'n to Fairchild's Mot. for Summ. J. pp. 3-5; see also Doc. 228, Pls.' Mot. to Extend Docket Date for Fairchild's Mot. for Summ. J.; Doc. 230, Ord. Dated Mar. 3, 2016.

⁶⁵ See Doc. 210, Docket Control Ord. Dated May 1, 2015; Doc. 239, Fairchild's Reply in Support of Mot. for Summ. J.

⁶⁶ See Doc. 244, Fairchild's Notice of Filing Suppl. to Ex. 1 of its Mot. for Summ. J.; Doc. 251, Fairchild's Notice of Filing Exs. to the Suppl. Decl. of Paul Dziorny; Doc. 252, Pls.' Suppl Mem. in Opp'n to Fairchild's Mot. for Summ. J.; Doc. 253, Fairchild's Suppl. in Support of Summ. J.

⁶⁷ See Doc. 238, Ord. Dated Apr. 13, 2016.

⁶⁸ See Doc. 241, Ord. Dated Apr. 22, 2016.

⁶⁹ See Doc. 243, Min. Entry Dated Apr. 26, 2016.

the case was transferred on May 5, 2016.⁷⁰

On May 12, 2016, Fairchild filed an amended answer to conform with Plaintiffs' live pleading.⁷¹ On July 8, 2016, Fairchild filed motions to exclude the expert testimony of Hansen and C. Van Netten.⁷² Plaintiffs responded to both motions on August 26, 2016, after requesting and receiving an extension of time to respond, and Fairchild filed a reply on September 7, 2016.⁷³

In light of the passage of time since the filing of Fairchild's dispositive motion, the intervening close of discovery, and the parties' supplemental filings, the court finds that the briefing is complete on the motion for summary judgment.

II. Summary Judgment Standard

Summary judgment is warranted when the evidence reveals that no genuine dispute exists on any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a); Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986); Stauffer v. Gearhart, 741 F.3d 574, 581 (5th Cir. 2014). A material fact is a fact that is identified by applicable substantive law as critical

⁷⁰ See Docs. 245, 246, Consents; Doc. 247, Ord. Dated May 5, 2015.

⁷¹ See Doc. 250, Am. Ans.

⁷² See Doc. 254, Fairchild's Mot. to Exclude Expert Report, Test., & Ops. of Hansen; Doc. 255, Fairchild's Mot. to Exclude Expert Report, Test., & Ops. of C. Van Netten.

⁷³ See Doc. 256, Pls.' Mot. to Extend Docket Date for Fairchild's Mot. to Exclude Reports, Test., & Ops. of Experts Hansen & C. Van Netten; Doc. 257, Ord. Dated July 27, 2016; Doc. 258, Pls.' Resp. in Opp'n to Fairchild's Mot. to Exclude Expert Report, Test., & Ops. of Hansen; Doc. 259, Pls.' Resp. in Opp'n to Fairchild's Mot. to Exclude Expert Report, Test., & Ops. of C. Van Netten.

to the outcome of the suit. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986); Ameristar Jet Charter, Inc. v. Signal Composites, Inc., 271 F.3d 624, 626 (5th Cir. 2001). To be genuine, the dispute regarding a material fact must be supported by evidence such that a reasonable jury could resolve the issue in favor of either party. See Royal v. CCC & R Tres Arboles, L.L.C., 736 F.3d 396, 400 (5th Cir. 2013)(quoting Anderson, 477 U.S. at 248).

The movant must inform the court of the basis for the summary judgment motion and must point to relevant excerpts from pleadings, depositions, answers to interrogatories, admissions, or affidavits that demonstrate the absence of genuine factual issues. Celotex Corp., 477 U.S. at 323; Topalian v. Ehrman, 954 F.2d 1125, 1131 (1992). If the moving party carries its burden, the nonmovant may not rest on the allegations or denials in his pleading but must respond with evidence showing a genuine factual dispute. Stauffer, 741 F.3d at 581 (citing Hathaway v. Bazany, 507 F.3d 312, 319 (5th Cir. 2007)).

III. Analysis

Fairchild argues that all of Plaintiffs' claims are preempted by federal law and cannot survive under the applicable federal law.⁷⁴ Alternatively addressing Plaintiffs' claims individually,

⁷⁴ Without conceding that Plaintiffs' state-law claims are not preempted by federal law, Fairchild now urges the court to disregard the issue and analyze Plaintiffs' claims under New York products liability law. Fairchild raised the issue of federal preemption, thus prompting the court to address whether federal or state law applies before addressing the merits of Plaintiffs' claims. The court cannot leave that question unanswered simply because Fairchild wavers on

Fairchild argues that none survive under New York products liability law. Plaintiffs respond that their claims are not preempted and that they have produced sufficient evidence to raise fact issues on their claims of defective design and failure to warn. Plaintiffs did not respond to Fairchild's arguments in favor of summary judgment on Plaintiffs' claims of breach of express and implied warranties, and, therefore, the court deems that claim abandoned.⁷⁵

A. Federal Preemption

Federal preemption "ultimately turns on congressional intent" and may be express or implied. Witty v. Delta Air Lines, Inc., 366 F.3d 380, 384 (5th Cir. 2004). When a statute does not expressly state congressional intent to preempt state law, as here, the implied preemption doctrines of field preemption and conflict

its commitment to the preemption argument.

⁷⁵ Paul Dziorny of Fairchild initially declared that Fairchild made no warranties relevant to the ACM but later amended his declaration to introduce a letter dated April 14, 2005, and a standard warranty policy. See Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶ 26; Doc. 244, Suppl. Decl. of Paul Dziorny ¶¶ 3-5; Doc. 251-1, Ex. 1 to Suppl. Decl. of Paul Dziorny, Letter from Fairchild to Global Aviation Servs. Dated Apr. 14, 2005; Doc. 251-2, Ex. 2 to Suppl. Decl. of Paul Dziorny, Standard Warranty Policy.

In a supplemental brief, Plaintiffs accuse Paul Dziorny of misrepresenting the facts in his original declaration and call into question his credibility. See Doc. 252, Pls.' Suppl. Mem. in Opp. to Mot. for Summ. J. pp. 7-8. However, Plaintiffs offer no substantive response to Fairchild's arguments in favor of summary judgment on the warranty claims. See *id.*

The court finds that, not only does Plaintiffs' failure to respond to these arguments represent an abandonment of the claims, but Fairchild's statute of limitations argument is meritorious. See N.Y. U.C.C. Law § 2-725 (stating that the statute of limitations for breach of contract for sale is four years from accrual, which occurs in the context of breach of warranty when tender of delivery is made). Fairchild shipped the ACM on February 13, 2007, more than seven years prior to Plaintiffs' filing suit. See Doc. 1, Pls.' Compl.; Doc. 227-2, Ex. 1 to Fairchild's Mot. for Summ. J., Decl. of Paul Dziorny ¶ 27. Thus, the statute of limitations bars Plaintiffs' warranty claims.

preemption come into play. See id. "[A] state claim is preempted where 'Congressional intent to preempt is inferred from the existence of a pervasive regulatory scheme' or where 'state law conflicts with federal law or interferes with the achievement of federal objectives.'" Id. (quoting Hodges v. Delta Airlines, Inc., 44 F.3d 334, 335 n.1 (5th Cir. 1995)).

The Third Circuit is the most recent federal circuit court to consider whether federal aviation law preempts the field of state tort law covering products liability claims. See Sikkelee v. Precision Airmotive Corp., 822 F.3d 680, 683 (3^d Cir. 2016), pet. for cert. filed, ____ U.S.L.W. ____ (Sept. 6, 2016)(No. 16-323). The plaintiff in Sikkelee alleged that the aircraft accident, which led to her husband's death was caused by a malfunction or defect in the engine's carburetor, and she brought claims under Pennsylvania law for strict liability and breach of warranty, among others. See id. at 685. The opinion found that Abdullah v. American Airlines, Inc., 181 F.3d 363 (3^d Cir. 1999), a prior Third Circuit opinion that held federal law preempts the field of aviation safety, did not govern products liability claims. See id. at 683, 688-90.

The court then turned to its preemption analysis, beginning with the question whether "the presumption that Congress does not preempt areas of law traditionally occupied by the states unless that is its clear and manifest intent" applies to products liability claims. Id. at 690; see also id. at 691-92. Deciding

that products liability is an area of law traditionally occupied by states, the court examined the Federal Aviation Act ("FAA"), subsequent relevant congressional action, and federal aviation regulations in search of Congress's "clear and manifest intent to preempt aviation products liability claims." Id. at 692; see also id. at 689-90, 692-99.

Finding "the indicia of congressional intent . . . point overwhelmingly the other way," the court continued its thorough discussion by analyzing field preemption in analogous statutory regimes and by way of the FAA's certification regulations. Id. at 698-99; see also id. at 700-05. The court also considered the aviation preemption precedent of federal appellate courts. See id. at 705-07. After also considering the policy arguments offered by the parties in that case, the court determined that field preemption did not apply to products liability claims. See id. at 708-09. Product liability claims remain "subject to traditional conflict preemption principles." Id. at 709.

The U.S. District Court for the Northern District of Texas addressed the issue in 2011. See Morris v. Cessna Aircraft Co., 833 F. Supp.2d 622 (N.D. Tex. 2011). That court also found that the presumption against preemption applied "because state tort law has long been concerned with securing compensation for its citizens who sustain injuries caused by defective products." Id. at 630 (citing Sprietsma v. Mercury Marine, 537 U.S. 51, 69 (2002)). The

court noted that neither the Supreme Court nor the Fifth Circuit had found the entire field of aviation preempted, although both had found specific areas of aviation preempted. Id. at 630 (discussing City of Burbank v. Lockheed Air Terminal Inc., 411 U.S. 624 (1973), and Witty, 366 F.3d at 380). The court concluded that field preemption did not apply to aircraft design and manufacture. See id. at 637; cf. McLennan v. Am. Eurocopter Corp., 245 F.3d 403, 425-26 (5th Cir. 2001)(applying state tort law to products liability claims arising out of a helicopter crash); Monroe v. Cessna Aircraft Co., 417 F. Supp.2d 824 (E.D. Tex. 2006)(providing a thorough discussion and concluding that neither the entire field of aviation safety nor products liability claims are impliedly preempted).

Implied preemption via the doctrine of conflict preemption applies only "where it is impossible for a private party to comply with both state and federal requirements, or where state law 'stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.'" English v. Gen. Elec. Co., 496 U.S. 72, 79 (1990)(citations omitted). The FAA sets out a system for the issuance of certificates, which includes a type certificate for a new design for an aircraft or aircraft part, a production certificate for a duplicate part produced for a particular aircraft, and an airworthiness certificate for a new aircraft prior to being put into operation. See 49 U.S.C. § 44704.

The FAA authorizes the Federal Aviation Administration to promulgate "regulations and minimum standards in the interest of safety." 49 U.S.C. § 44701.

The court finds the rationale of the well-considered opinions in Sikkelee and Morris to be convincing. The court concurs that the federal statutory and regulatory scheme on aviation does not preempt the field of products liability. Those opinions also acknowledge, in the discussions of field preemption, that the certification system effectuates "baseline requirement[s]" that "speak to a floor of regulatory compliance." Sikkelee, 822 F.3d at 694 (noting "that the regulations are framed in terms of standards to acquire FAA approvals and certificates—and not as standards governing manufacture generally" in support of its conclusion that they are merely "baseline requirement[s]"); Morris, 833 F. Supp.2d at 635 (noting that, "in the area of aircraft design and manufacture requirements," are empowered "to create only 'minimum standards'").

This court finds that products liability law is not preempted as a field. This court also concludes that the minimum standards of the federal aviation regulations do not prohibit the design and manufacture of safer aircraft and component parts. Therefore, conflict preemption also does not apply.

B. Defective Design

The federal preemption disagreement aside, the parties'

citation to New York law demonstrates their agreement that, if any state law applies, it is that of New York, the location of the air space in which the incident occurred.⁷⁶

In 2010, the Court of Appeals of New York reaffirmed what the court previously stated was required to prove a design defect:

In order to establish a *prima facie* case in strict products liability for design defects, the plaintiff must show that the manufacturer breached its duty to market safe products when it marketed a product designed so that it was not reasonably safe and that the defective design was a substantial factor in causing plaintiff's injury.

Adams v. Genie Indus., 929 N.E.2d 380, 383-84 (N.Y. 2010) (quoting Voss v. Black & Decker Mfg. Co., 450 N.E.2d 204, 208 (N.Y. 1983)).

A product is "not reasonably safe" when, "if the design defect were known at the time of manufacture, a reasonable person would conclude that the utility of the product did not outweigh the risk inherent in marketing a product designed in that manner." Id. at 384 (quoting Voss, 450 N.E.2d at 208). The court explained that the plaintiff's burden is "to present evidence that the product, as designed, was not reasonably safe because there was a substantial likelihood of harm and it was feasible to design the product in a safer manner." Id. (quoting Voss, 450 N.E.2d at 208).

Based on that language, New York courts require a strict liability plaintiff to prove that: "(1) the product as designed

⁷⁶ Plaintiffs explicitly stated their agreement to the application of New York law. Doc. 236-2, Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J. p. 16 n.4.

posed a substantial likelihood of harm; (2) it was feasible to design the product in a safer manner; and (3) the defective design was a substantial factor in causing the plaintiff's injury."⁷⁷ Ferracane v. United States, No. 02-CV-1037 (SLT), 2007 WL 316570, at *5 (E.D.N.Y. Jan. 30, 2007)(applying New York law and citing cases). The Voss decision led to the use of a "factor-based risk/utility analysis." Ferracane, 2007 WL 316570, at *5. To meet his burden under that analysis, a plaintiff must offer more than "unsupported, conclusory evidence on the technological and economic feasibility of a safer design." Id. (quoting G.E. Capital Corp. v. A.O. Smith Corp., No. 01 Civ.1849 LAP, 2003 WL 21498901, at *4 (S.D.N.Y. July 1, 2003)); see also Guarascio v. Drake Assocs. Inc., 582 F. Supp.2d 459, 463 (S.D.N.Y. 2008)(applying New York law and calling for admissible evidence on the technological and economic feasibility of an alternative design); Adams, 929 N.E.2d at 385 (favorably acknowledging the argument that "merely . . . showing that a safer product was theoretically possible at the time" is not enough).

Two means are available to satisfy the plaintiff's burden:

1. Plaintiff's expert can show, through testing and construction of a prototype, that such an alternative design is within the realm of practical engineering feasibility, thereby demonstrating the utility, cost, safety, sanitation and other characteristics of the proposed alternative; and/or

⁷⁷ The standards are the same whether the allegation is negligent or strict liability design defects. Adams, 929 N.E.2d at 384.

2. Plaintiff's expert can identify makers of similar equipment who have already put into use the alternative design that has been proposed.

Rypkema v. Time Mfg. Co., 263 F. Supp.2d 687, 692 (S.D.N.Y. 2003) (applying New York law). The Rypkema court excluded the expert's testimony produced by the plaintiff because the expert had not reconstructed the accident, proposed an alternative design, evaluated the feasibility of an alternative design, explained how an alternative design would have prevented injury, or pointed to use of an alternative design in the marketplace. See id. The court then granted summary judgment in favor of the defendant because the plaintiff lacked evidence of product liability. See id. at 694.

In Adams, the court considered whether the plaintiff had produced enough evidence for the jury to find likelihood of harm and feasibility of an alternative, safer design. Adams, 929 N.E.2d at 384. The court found that the plaintiff had produced sufficient evidence where, in addition to the testimony of a former employee of the manufacturer regarding consideration of an alternative design at the time of manufacture, the plaintiff's experts explained how the alternative design would have made the product safer, illustrated feasibility with a model of the product with the design changes, demonstrated how the alternative product worked, and testified that the concept was not new at the time of manufacture and that the alterations were not expensive at that

time. See id. at 384-85.

In Ferracane, the court found the expert's opinion to be insufficient to establish that feasible, safer alternatives existed at the time of manufacture because he proposed hypothetical designs without details about the proposed alternatives, had not tested the alternative designs, had not illustrated the proposed designs with a drawing, mock-up, or prototype, was unable to identify a manufacturer who had ever used the alternative designs proposed in the product, and did not testify to the cost or feasibility of the alternative designs. Ferracane, 2007 WL 316570, at *6. The court cited other cases in which the evidence was insufficient: (1) Gonzalez by Gonzalez v. Morflo Industries, 931 F. Supp. 159, 166 (E.D.N.Y. 1996), in which the court found insufficient the expert's testimony on hypothetical designs that had never been tested coupled with no cost or feasibility analysis and no identification of a manufacturer that had used the proposed designs; (2) Sita v. Danek Medical, Inc., 43 F. Supp.2d 245 (E.D.N.Y. 1999), in which the court found insufficient the expert's testimony that a device with "hooks instead of screws" or "no system at all" would be safer but failed to point to any evidence to support these conclusory statements. Ferracane, 2007 WL 316570, at *5.

In this case, Hansen provided a report⁷⁸ in which he stated,

⁷⁸ The court need not determine whether Hansen's report is admissible under the Federal Rules of Civil Procedure because, even assuming it is, the court finds that his opinions are insufficient to meet New York standards for a plaintiff's burden on an alternative, safer design.

"It is most likely that damage-causing dangerous fumes, generated from aerosolized and/or vaporized turbine engine oils, were allowed to enter the cabin through the use of the ACM at issue."⁷⁹ He noted that the ACM did not include "safety features such as oil-less bearings, fume absorbers, filters, or early warning sensors that could have operated to avoid damage to cabin occupants."⁸⁰ He repeated these suggested features several times in his report but provided no indication of how they could be retrofitted into the ACM or how an entirely new system incorporating those features would work in place of the ACM.⁸¹

Regarding alternative, feasible, safer design options, the most Hansen offered was the following:

Alternative systems capable of preventing the claimant's damage (which would not be unduly burdensome on anyone) were/are available – Modern design practices for ACM equipment avoids the use of turbine engine oil lubrication systems entirely, instead using "air bearings" and "ceramic hybrid bearings." Additionally, high efficiency particulate (HEPA) filters combined with activated charcoal or similar filters could have been installed to remove both particles and chemical from the cabin air. In the interest of safety, Fairchild could and should have produced some FAA Supplemental Type Certificate (STC) to at least install some fume sensors, filters, absorbers, and/or suggested diverters to adequately warn cabin occupants such as the plaintiffs. Also, Fairchild could have used oil-less bearings as

⁷⁹ Doc. 236-6, Ex. 3 to Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J., Hansen's Report p. 4. Hansen also postulated that, in addition to oil from the turbine engines, the oil bearings within the ACM could leak oil into the airflow. See id. pp. 6-8.

⁸⁰ Id. p. 4.

⁸¹ See id. pp. 4, 5, 7, 8.

suggested above.⁸²

Without offering more detail as to any alternative design, Hansen concluded that the fume event "could have been avoided if [Fairchild] had used common oil-less air bearings, filters, fume absorbers, sensors, or other easily available design features."⁸³

When Hansen's report is compared with the expert opinions considered by the courts in the cases cited above, it belongs in the group of those that were found to be insufficient to carry the plaintiffs' claims to trial. His efforts fall woefully short of the evidence in Adams, which the Court of Appeals of New York found sufficient for jury consideration. As with the cases in which the expert opinions were found to be insufficient, Hansen suggested hypothetical changes without any details. His ideas were not developed at all, much less committed to paper, made into models, or tested. Hansen did not point to any manufacturer who used a design that incorporated any or all of the design features he mentioned.⁸⁴ Significantly, Hansen offered nothing more than conclusory assertions about economic feasibility, stating only that

⁸² Id. p. 5 (emphasis in original)(internal citations omitted).

⁸³ Id. p. 8.

⁸⁴ Although not mentioned in Hansen's report, Plaintiffs point, in their response brief, to a design of an air pressurization system that they allege was on the market in 2006. See Doc. 236-2, Pls.' Mem. in Opp. to Fairchild's Mot. for Summ. J. p. 22. Even if Plaintiffs could produce evidence of the design's existence in the market at the relevant time, it would not carry Plaintiffs' burden to show that it would have been safer, that it could have functioned in the place of the Fairchild ACM, or that it would have been feasible for use in place of the Fairchild ACM.

the design features were easily available and not unduly burdensome rather than analyzing the risk/utility of each or all of his suggestions.

New York law directs this court to grant Fairchild summary judgment on Plaintiffs' design defect claims.

C. Failure to Warn

A manufacturer may be held liable for failure to warn of latent dangers that it knew or should have known existed from foreseeable usage of a product. Hall v. Husky Farm Equip., Ltd., 939 N.Y.S.2d 604, 608 (N.Y. App. Div. 2012)(citing Liriano v. Hobart Corp., 700 N.E.2d 303, 305 (N.Y. 1998)). However, New York courts recognize a "knowledgeable user" exception, which allows courts to find as a matter of law either that the manufacturer had no duty or that the duty was discharged. See Steuhl v. Home Therapy Equip., Inc., 857 N.Y.S.2d 335, 337 (N.Y. App. Div. 2008)(citing Travelers Ins. Co. v. Fed. Pac. Elec. Co., 625 N.Y.S.2d 121, 123 (N.Y. App. Div. 1995)); Bigness v. Powell Elecs., Inc., 619 N.Y.S.2d 905, 906 (N.Y. App. Div. 1994)(citing cases)). "Where the person who would benefit from a warning is already aware of the specific hazard, the manufacturer cannot be held liable for failing to warn of that known hazard." Steuhl, 857 N.Y.S.2d at 337 (citing Lombard v. Centrico, Inc., 557 N.Y.S.2d 627, 628 (N.Y. App. Div. 1990)).

In this case, Farmer and Davidson were aware of the occurrence

of smoke and fumes in the cabin and cockpit of the Twin Commander 690A prior to taking the May 31, 2011 flight. The very purpose of the mission, as explained to them, was to confirm the presence of smoke and fumes that had been reported by Bill O'Connor a few days earlier. Both Farmer and Davidson knew that others had experienced odors, smoke, and/or fumes during flights. Farmer had experienced such events many times while flying the Twin Commander 690A prior to May 31, 2011. Both Farmer and Davidson had reported concerns to management. Both were aware of possible harm, Farmer from personal experience and Davidson from personal research. As soon as they boarded the airplane, they could smell the smoke and fumes. Yet, they continued the mission. In light of that evidence, it appears that a warning would not have dissuaded Farmer and Davidson from taking the flight. Plaintiffs presented no evidence to the contrary.

Thus, the "knowledgeable user" exception applies. New York law directs this court to grant Fairchild summary judgment on Plaintiffs' claim of failure to warn.

IV. Conclusion

Based on the foregoing, the court **GRANTS** Fairchild's motion for summary judgment. Jana and the children may not maintain their derivative claims for loss of consortium in the absence of any substantive claim. See Griffin v. Garratt-Callahan Co., 74 F.3d 36, 40 (2^d Cir. 1996) (applying New York law and dismissing claims

for loss of consortium because none of the spouse's claims survived). As that disposes of the case, the court **DENIES AS MOOT** Fairchild's motions to exclude.

SIGNED in Houston, Texas, this 29th day of September, 2016.



A handwritten signature in black ink, appearing to read "J. J." followed by a stylized surname. The signature is written over a horizontal line.

U.S. MAGISTRATE JUDGE